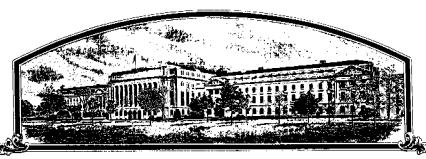
No.



7200106

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

John A. Howden

TUlhereas, there has been presented to the

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, therefore, this certificate of plant variety protection is to grant unto the said applicant(s) and the successors, heirs or assigns of the said applicant(s) for the term of seventeen—years from the date of this grant, subject to the payment of the required fees and periodic replenishment of viable basic seed of the variety in a public repository as provided by LAW, the right to exclude others from selling the variety, or offering it for sale, or reproducing it, or importing it, or exporting it, or using it in producing a hybrid or different ariety therefrom, to the extent provided by the Plant Variety Protection Act NTAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

PUMPKIN

'Howden'

In Testimony Watercot, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 31st day of May in

this 31st day of May in the year of our Lord one thousand nine hundred and seventy-seven

& Dera land

Secretary of Agriculture

St. Sole

Attest:

Commissioner Plant Variety Protection Office Grain Division

FORM APPROVED OMB NO. 40-R3712

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse. 1. VARIETY NAME OR TEMPORARY	2. KIND NAME		FOR OFFICIAL USE ONLY			
DESIGNATION			PVPO NUMBER			
HOWDEN		PUMPKIN		106	- bw	
3. GENUS AND SPECIES NAME		4. FAMILY NAME (Botanical)		TIME	(A M	
√//ÅPEPO		CUCURBITA CACAC		CHARGES	P-M 2	
- -		1960 - 1971				
6. NAME OF APPLICANT(S)	7. ADDRESS (Street	1960 - 1971 \$750, 22 7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP)			ONE AREA	
	Code) Ranna	Rannapo Road			CODE AND NUMBER	
JOHN A. HOWDEN		Pield, Massachus	etts 01257	(413) 2	29-8481	
	·					
9. IF THE NAMED APPLICANT IS NOT A ORGANIZATION: (Corporation, partners)		10. STATE OF INCO	RPORATION	11. DATE	OF INCOR- ION	
12. Name and mailing address of app	olicant representative	e(s), if any, to serve	in this application a	nd receive	all papers:	
	,				1 1	
. •						
				,		
13. CHECK BOX BELOW FOR EACH ATTA	ACHMENT SUBMITTED:				_	
(Files Public A colling of F	North Control	W 1 . /C . C .:	50 D 1 01 577)			
12A. Exhibit A, Origin and B	sreeding History of th	e Variety (See Section	on 32, P.L. 91-3//)			
🔀 128. Exhibit B, Botanical De	escription of the Vari	iety				
¥5						
12c. Exhibit C, Objective De	escription of the Vari	ety				
🔀 120. Exhibit D, Data Indicat	ive of Novelty					
🔀 12E. Exhibit E, Statement of	the Basis of Applica	int's Ownership				
The applicant declares that a viabl	e sample of basic se	ed of this variety wi	Il he denosited upon	request he	ore iccu-	
ance of a certificate and will be re	-	•		-		
(See Section 52, P.L. 91-577).						
14A. Does the applicant(s) specify t (See Section 83(a), P.L. 91-577	hat seed of this varie	ety be sold by variet	y name only as a cla) PYES X NO	ss of certif	ied seed?	
148. Does the applicant(s) specify t			14B, how many gene		production	
limited as to number of generat	party prompt	beyond breed	ler seed?			
Applicate in informal shot falls are	YES N			-1-1		
Applicant is informed that false rep	presentation nerein ca	an jeopardize protect	ion and result in per	aities.		
The undersigned applicant(s) of thi	is sexually-reproduce	d novel plant variety	believes that the vo	riety is dis	stinct,	
uniform, and stable as required in S	· · · · · · · · · · · · · · · · · · ·	= -		•		
Plant Variety Protection Act (P.L.	91-577).	\cap \cap	, ,	a		
March 8 19	12	totan	2 How	1000		
(DATE)	1 -	(\$	IGNATURE OF APPLICA	NT)		
		\cup				
			160471167 AR 455115			
(DATE)		(S	IGNATURE OF APPLICA	^{ለለፒ፣} ለሰሰ	11	

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S. DEPARTMENT TO 1972

INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and \$50.00 fee to U.S. Dept. of Agriculture, Consumer and Marketing Service, Grain Division, Hyattsville, Maryland 20782. Retain one copy for your files. All items on the face of the form are self-explanatory unles noted below.

ITEM

- 5 Insert the date the applicant determined that he had a new variety.
- 12a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.
- 12b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.
- 12c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.
- 12d Provide complete data indicative of novelty. Seed and plant specimens may be submitted and seeds submitted may be sterile. Where possible, include photographs of plant comparisons, chemical tests, etc.
- 12e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

HOWDEN FARM

TEL. 413-229-8481

SHEFFIELD, MASSACHUSETTS 01257

Exhibit A

PV# 7200106

GENEALOGY OF THE HOWDEN PUMPKIN

The first specimens were recognized in 1960 as being unusually dark in color, in a field of very variable Connecticut Field pumpkins which appeared to have some mixture of another variety in it.

From this first cross other traits appeared and seed from these specimens were grown together in isolation and selected over the years until now the Howden variety breeds true as described.

If necessary, I offer as reference:

Mr. Joseph Harris Joseph Harris Seed Company Rochester, New York 14624

He and some members of his firm are familiar with this variety, especially his Mr. Ken Ralph who has seen my field of this variety.

HOWDEN FARM

TEL. 413-229-8481

SHEFFIELD, MASSACHUSETTS 01257

Exhibit B R S

PV # 7200106

DESCRIPTION of the "HOWDEN PUMPKIN"

A large pumpkin with a smooth, slightly-ribbed, very deep orange-colored shell and with thick firm flesh of a rich orange color. It has a heavy dark strong stem, a hard shell and excellent keeping qualities. It has a desirable uniformly round shape; slightly flattened on top and bottom, the height averaging slightly greater than the width with a very few flatter specimens.

It grows on a trailing wine, the characteristics of which are the same as other varieties of pumpkins of the Pepo Cucurbita family.

Compared to the well-known Connecticut Field pumpkin this variety is equal or larger in size when grown under the same conditions. It is much thicker-fleshed, thus a much heavier pumpkin. It has a much darker orange-colored shell and richer orange-colored flesh. It has stronger, heavier stems and keeps better.

EXHIBIT D Howden Pumpkin

The differences in the Howden Pumpkin as compared to the Connecticut Field Pumpkin, to which it is most similar, are as follows:

- 1. The Howden Pumpkin has a much darker, richer orange color. This corresponds to the color on the Royal Horticultural Color Chart on Page 155 listed as Indian Orange No. 713/1, as contrasted to the Connecticut Field Pumpkin which corresponds to the color on page 101 listed as yellow othre No. 07 to 07/1.
- 2. The Howden Pumpkin has a darker, heavier stem with branching base, which prevents it from breaking away from the fruit because it is rooted into the very flesh. As one person described it, "A stem which grows into the pumpkin."
- 3. The Howden Pumpkin has a thicker flesh, thus making it a heavier pumpkin; the thicker flesh also helps maintain a more even shape with fewer mishapen fruits.
- 4. The ribbing is more prominent.
- 5. The Howden Pumpkin has a much harder rind, giving it superior handling and keeping qualities. It keeps much better than any other pumpkin. While no disease resistance is credited to it, its excellent keeping quality may be due in part to a resistance to storage rot.

As the Howden Pumpkin is an open variety, there is variation in size and some variation in shape and prominence of ribbing. The other characteristics listed are quite stable.

Color photos accompanying this show the color, stem and ribbing.

Please file them with this description.

Pumpkin application No. 7200106 "Howden."

HOWDEN FARM

TEL. 413-229-8481

SHEFFIELD, MASSACHUSETTS 01257

Exhibit E

PV # 7200106

Office of Plant Certification U. S. Department of Agriculture Hyattsville, Maryland 2078 2

THIS IS TO STATE THAT I, JOHN A. HOWDEN OF HOWDEN FARM, SHEFFIELD, MASSACHUSETTS, AM THE OWNER, BREEDER AND DEVELOPER OF THE HOWDEN PUMPKIN.

(Signed

JOHN A. HOWDEN

Dated: March 7, 1972 Sheffield, Massachusetts

Subscribed and sworn to before me.

Notary Public
My comm. expires 7/16/76

ASSIGNMENT

THIS AGREEMENT, made on the dates set forth below, having retroactive effect to April 15, 1998, by Bruce M. Howden, as coadministrator of the estate of John A. Howden, residing at 32 North Champlain Street, Burlington, VT 05401-4320 and Richard A. Howden, as co-administrator of the estate of John A. Howden, residing at 3000 Shore Drive, L.H., Crawfordsville, IN 47933 (hereinafter jointly referred to as the Assignor), witnesseth:

WHEREAS, the said John A. Howden and Virginia J. Howden are the owners of all right, title and interest in and to Plant Variety Protection Certificate No. 9200044 for the "Howden Biggie" pumpkin (hereinafter referred to as "CERTIFICATE";

WHEREAS, John A. Howden died on September 11, 1997 and the Assignor was duly appointed as co-administrators of the estate of John A. Howden by the Berkshire County (Massachusetts) Probate and Family Court Department; and

WHEREAS, the said Bruce M. Howden and Richard A. Howden, individually, having residence addresses as set forth above (hereinafter jointly referred to as Assignee), are the heirs-at-law of the estate of John A. Howden;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient considerations, the receipt of which is hereby acknowledged, the said Assignor has sold, assigned, transferred and set over, and by these presents does sell, assign, transfer and set over, unto the

said Assignee, its successors, legal representatives and assigns, the entire right, title and interest of John A. Howden in and to said CERTIFICATE, the same to be held and enjoyed by the said Assignee for its own use and behoof and the use and behoof of its successors, legal representatives and assigns, to the full end of the term or terms for which said CERTIFICATE may be granted, as fully and entirely as the same would have been held and enjoyed by the Assignor had this sale and assignment not been made.

AND for the same consideration, the said Assignor hereby covenants and agrees to and with the said Assignee, its successors, legal representatives and assigns, that the said Assignor will, whenever counsel of the said Assignee, or the counsel of its successors, legal representatives and assigns, shall advise that any proceeding in connection with said CERTIFICATE is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the maintenance, enforcement and defense of said CERTIFICATE, at the cost and expense of the said Assignee, its successors, legal representatives and assigns.

Bruce M. Howden

STATE OF __Massachusetts _____) ss.

COUNTY OF __Berkshire _____)

On this 27th day of May, 1998, personally before me came Bruce M. Howden, known to me, and known to me to be the person described and who signed the annexed Assignment, and, being duly sworn,

acknowledged that he executed the same.

(SEAL)	Notary Public Gerald A. Denmark My Commission Expires: 7/27/01
	Richard A. Howden
STATE OF Massachusetts COUNTY OF Berkshire)) ss.)

On this 27th day of May 1998, personally before me came Richard A. Howden, known to me, and known to me to be the person described and who signed the annexed Assignment, and, being duly sworn, acknowledged that he executed the same.

Notary Public - Gerald A. Denmark My Commission Expires: 7/27/01

(SEAL)

FORM GR-470-20 (12-16-74)

UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE GRAIN DIVISION HYATTSVILLE, MARYLAND 20782 OBJECTIVE DESCRIPTION OF VARIETY

EXHIBIT C (Pumpkin/ Squash/Gourd)

PUMPKIN/SQUASH/GOURD (CUCURBITA SPP.)

	THE PLETTY NAME OF TEMPORARY
JOHN A HOWDEN	DESIGNATION F N
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)	FOR OFFICIAL USE ONLY
SHEFFIELD MASS	,01257 7200106
Place the appropriate number that describes the varietal character. Place a zero in first box (e.g. 0 8 9 or 0 9) when number	r of this variety in the boxes below. is either 99 or less or 9 or less.
1. SPECIES:	
	MOSCHATA 5 = PEPO 6 = OTHER (Specify)
2. KIND (According to use):	3. TYPE:
1 = PUMPKIN 2 = SQUASH 3 = GOURD	1 = SUMMER (Vegetable Marrow) 2 = WINTER (Boston Marrow)
4. COTYLEDON:	
0 8 5 MM. LONG 0 4 6 MM. W	IDE
Apex: 1 = TAPERED 2 = ROUNDED 3 = NOTCHED	Veining: 1 = OBSCURE 2 = PLAINLY VISIBLE 3 = PROMINENT
1 = LIGHT GREEN 2 = GRAY-GREEN 3 = MEDIUM G	GREEN 4 = DARK GREEN
5. PLANT:	
1 = BUSH 2 = SEMI-BUSH 3 = LONG VINES	1 = PILOSE 2 = PRICKLY 3 = GLABROUS
6. MAIN STEM:	THE AMERICA HENCTH
	OF FIRST INTERNODE 793 CM. AVERAGE LENGTH
AVERAGE NUMBER OF INTERNODES	
7. LEAVES:	1 = NOT LOBED 2 = SHALLOW LOBED
3 = RENIFORM 4 = RETUSE	Shape: 3 = DEEP LOBED
Margin: 1 = ENTIRE 2 = DENTICULATE 3 = DENTATE	Margin: 1 = FLAT 2 = FRILLED
36 cm. wide 25 cm. Long	Surface: 1 = SMOOTH 2 = BLISTERED
Dorsal Surface:) 1 = GLABROUS 2 = SOFT HAIRY	3 = BRISTLED
Ventral Surface:	
1 = LIGHT GREEN 2 = GRAY-GREEN 3 = MEDIUM GREEN 4 = DARK GREEN	1 = NOT BLOTCHED 2 = BLOTCHED WITH GRAY
Z S CM. PETIOLE LENGTH	
8a. FLOWER - Pistillate:	
<u> </u>	JM-LIKE 3 = FUSIFORM Pedicel: CM. LENGTH
Margin: 1 = STRAIGHT 2 = CURVED	Sepals: MM. WIDTH 69 Sepals: MM. LENGTH
Color: 1 = WHITE 2 = LEMON YELLOW 3 = N	AID-YELLOW 4 = DEEP YELLOW 5 = ORANGE

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FORM GR 470-20 (Page 3 of 4)	7200106				
Texture: 1 = FINE 2 = GRANULAR 3 = LUMPY 4 = STRINGY	Z Texture: 1 = SOFT 2 = FIRM 3 = BRITTLE				
7 Texture: 1 = DRY 2 = MOIST 3 = JUICY	Flavor: 1 = INSIPID 2 = SLIGHTLY SWEET 3 = SWEET				
Quality: 1 = INEDIBLE 2 = GOOD 3 = EXCELLENT	O 3 O 8 Color: (Choose from rind colors above)				
12. SEED CAVITY: (Sectioned apex to base)					
23 CM LENGTH	25 cm width				
1 = CONFORMS TO FRUIT SHAPE Location: 2 = NEAR APEX 3 = APEX ONLY Placental Tis	1 = SPARSE sue: 2 = MODERATELY ABUNDANT 1 = INCONSPICUOUS 2 = PROMINANT 2 = PROMINANT				
13. FRUIT STALKS					
O CM LENGTH	O 3 CM DIAMETER				
1 = ROUND 2 = IRREGULAR 1 = NOT TWISTED 2 = TWISTED	1 = NOT TAPERED 2 = TAPERED 2 = TAPERED 3 = CURVED				
3 Texture: 1 = SOFT 2 = SPONGY 3 = HARD	Farrows: 1 = NONE 2 = SHALLOW 3 = DEEP				
Surface: 1 = SMOOTH 2 = ROUGH 3 = SPINY	1 = NOT EXPANDED 2 = SLIGHTLY EXPANDED 3 = EXPANDED				
Detaches: 1 = EASILY 2 = WITH DIFFICULTY	Color: 1 = LIGHT GREEN 2 = MEDIUM GREEN 3 = DARK GREEN				
14. SEEDS					
20 MM LENGTH / 3 MM W	D 3 MM THICKNESS				
1 = SMOOTH 2 = WRINKLED 3 = SLIGHTLY PITTED 4 = SCALY 5 = CREASED	3 Color: 1 = WHITE 2 = CREAM 3 = 8UFF 4 = BROWN				
Luster: 1 = DULL 2 = GLOSSY	Margin: 1 = STRAIGHT 2 = CURVED 3 = TWISTED				
Margin: 1 = ROUNDED 2 = WEDGE-LIKE					
Separation from pulp: 1 = EASY 2 = MODERATELY EASY 2 Separation from pulp: 3 = DIFFICULT GMS PER 100 SEEDS					
7 0 3 NO. SEEDS PER FRUIT 1 = NORMAL 2 = NAKED					
15. DISEASE RESISTANCE: (O A Not Tested, 1 = Susceptible, 2 = Resis	tant)				
	R MOSAIC SQUASH MOSAIC				
WATERMELON MOSAIC OTHER (Specify) Starage Tots					
16. INSECT RESISTANCE: (Q = Not Tested, 1 = Susceptible, 2 = Resista	int .				
O SQUASH BUG	OTHER (Speciefy)				
17. INDICATE A VARIETY MOST CLOSELY RESEMBLING THAT SUBMITTED FOR EACH CHARACTER					
CHARACTER VARIETY	CHARACTER VARIETY				
LEAF TYPE COAN, FIELD					
FLOWER TYPE COND. FIELD	CULINARY TYPE CONN. FIELD				
	I DNN FICIA				
REFERENCES 1. Currence, T. M. 1954. Vegetable Crops Breeding, Department of Horticulture, University of Minnesota.					

- 2. Tapley, W.T., Enzie, W.D. and Van Eseltine, G. P., 1937. Vegetables of New York: The Cucurbits 1 (4). J.B. Lyon Company, Albancy, New York.
- 3. USDA Farmess Bulletin No. 1086. 1969. Growing Pumpkins and Squashes.

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4. Whitaker, T.W. and G.N. Davies. Cucurbits. Interscience Publications, Inc., New York, N.Y.

18. COMMENTS

The differences in the Howden pumpkin, as compared to the Connecticut Field, are: the much richer, dark orange color, the heavy dark stem with branching base, which prevents it from breaking away from the fruit because it is rooted into the very flesh. As one person described it, a stem which grows into the pumpkin. It has thicker flesh, thus making it a heavier pumpkin and also the thicker flesh helps maintain a more even shape with fewer misshapen fruits. Its ribbing is more prominent and it has a much harder rind, giving it superior handling and keeping qualities. The Howden pumpkin keeps much better than any other pumpkin. While no disease resistance is credited to it, its excellent keeping quality may be due in part to a resistance to storage rot. As it is an open variety there is variation in size and some variation in shape, and prominence of ribbing. The other characteristics listed are quite stable. Color photos accompanying this show the color, stem and ribbing. Please file them with this description.



application to 12106

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